

Mineral Industry Surveys

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SULFUR IN DECEMBER 2005

During the month, production of recovered elemental sulfur was 712,000 metric tons, according to the U.S. Geological Survey. December production was 5% higher than that of November 2005 and 14% lower than that of December 2004. Shipments were 8% higher than those of November 2005. Producers' ending stocks for December 2005 were 160,000 tons. Sulfur production increased as petroleum refineries continued to recover from the effects of Hurricanes Katrina and Rita.

Import and export data for December 2005 were not available at the time of publication and will be published in the Sulfur in

January 2006 Mineral Industry Surveys along with apparent consumption. Imports of recovered sulfur for November 2005 were estimated to be 233,000 tons; exports were 14,000 tons. Imports of sulfuric acid for November 2005 were 181,000 tons; exports were 7,000 tons.

Significant adjustments have been made to the sulfur import data. Reports from the U.S. Census Bureau appear to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information and data from personal communications with industry experts.

TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Ending stocks ³
	Petroleum ²	Natural gas	Total		
2004:					
January-December	7,390	1,990	9,380	9,410	XX
December	664	167	831	846	185
2005:					
January	573 ^r	169	742 ^r	742 ^r	179
February	546 ^r	156	702 ^r	694 ^r	187 ^r
March	584 ^r	169	753 ^r	753 ^r	183 ^r
April	597 ^r	157	754 ^r	755 ^r	168
May	620 ^r	159	780	768 ^r	177 ^r
June	618 ^r	158	775 ^r	772 ^r	178
July	619 ^r	153	772 ^r	772 ^r	175 ^r
August	647	163	810 ^r	812 ^r	175
September ^r	486	141	627	631	165
October ^r	475	136	611	611	158
November ^r	551	129	679	668	172
December ^p	584	128	712	720	160
Total	6,900	1,820	8,720	8,700	XX

^pPreliminary. ^rRevised. XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes a small quantity from coking operations.

³Subject to inventory adjustments.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries ²	
	Quantity ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³
2004:						
January-December	2,010	31,300	545	28,200	2,850	76,800
January-November	1,850	28,600	490	26,000	2,630	71,300
November	150	2,650	31	1,240	186	5,700
December	160	2,660	55	2,200	226	5,400
2005:						
January	145	2,070	31	1,070	239	4,730
February	130	2,130	50	1,930	230	6,080
March	145	2,320	40	1,640	185	4,050
April	165	2,530	47	1,840	249	5,830
May	170	1,890	40	1,570	251	5,140
June	165	2,460	40	1,780	235	5,670
July	170	2,650	40	1,490	218	5,610
August	170	2,820	20	808	221	5,040
September	160	3,020	39	1,600	241	6,360
October	185 ^r	3,570	44	1,900	227 ^r	7,770
November	180	3,680	29	1,130	233	5,710
Total	1,790	29,100	420	16,700	2,530	62,000

^eEstimated. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

Sources: U.S. Census Bureau data as adjusted by U.S. Geological Survey and PentaSul North America Sulphur Service.

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total, all countries ²		
	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³
2004:									
January-December	1,920	628	72,500	206	67	6,670	2,390	780	86,300
January-November	1,760	573	67,500	176	58	6,010	2,130	698	78,800
November	160	52	5,930	11	4	289	218	71	7,500
December	140	46	4,970	30	10	655	251	82	7,510
2005:									
January	173	57	5,990	30	10	840	248	81	9,490
February	174	57	6,190	(4)	(4)	18	213	70	7,820
March	183	60	7,080	32	10	759	254	83	8,590
April	191	63	7,770	10	3	629	250	82	9,660
May	158	52	6,370	--	--	--	192	63	7,080
June	144	47	5,360	--	--	--	189	62	6,380
July	168	55	6,840	(4)	(4)	5	213	70	7,790
August	156	51	6,490	(4)	(4)	83	196	64	9,150
September	169	55	6,890	11	4	198	241	79	8,260
October	178	58	7,880	6	2	149	253	83	11,600
November	138	45	5,910	5	2	188	181	59	6,820
Total	1,690	555	66,800	94	30	2,870	2,430	796	92,700

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value ²	Quantity	Sulfur content	Value ²
2004:					
January-December	949	63,300	204	67	21,300
January-November	818	54,500	191	63	20,200
November	31	2,280	20	7	1,590
December	130	8,740	13	4	1,120
2005:					
January	22	1,740	13	4	1,590
February	72	5,040	28	9	2,230
March	41	6,270	31	10	2,270
April	94	6,010	51	17	3,280
May	16	1,850	26	8	2,560
June	56	5,920	38	12	3,630
July	64	4,520	24	8	1,920
August	71	5,330	25	8	2,600
September	42	3,470	26	8	2,810
October	104	7,070	32	10	3,020
November	14	2,940	7	2	992
Total	492	43,100	269	87	23,900

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Declared f.a.s. (free alongside ship) valuation.

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR¹

(Thousand metric tons)

Period	Domestic sources ²	Imports ^c	Consumption
2004:			
January-December	8,470	2,850	11,300
January-November	7,750	2,630	10,400
November	740	186	926
December	716	226	942
2005:			
January	720 ^r	239	959 ^r
February	622 ^r	230	852 ^r
March	712 ^r	185	897 ^r
April	661 ^r	249	910 ^r
May	752 ^r	251	1,000 ^r
June	716 ^r	235	951 ^r
July	708 ^r	218	926 ^r
August	741 ^r	221	962 ^r
September	589 ^r	241	830 ^r
October	507 ^r	227	719 ^r
November	654	233	887
Total	7,380	2,530	9,910

^cEstimated. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT¹

(Thousand metric tons)

District and source	December 2005 ^p		November 2005		January - December 2005 ²		January - December 2004 ²	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	15	16	13 ^r	13 ^r	234	235	236	238
Natural gas	2	1	1	2	19	18	21	21
Total	17	17	14 ^r	15 ^r	253	253	256	259
PAD 2:								
Petroleum and coke	75	76	74 ^r	74 ^r	996	1,000	976 ^r	978 ^r
Natural gas	3	3	3	3	36	36	43	43
Total	78	79	77 ^r	77 ^r	1,030	1,040	1,020 ^r	1,020 ^r
PAD 3: ³								
Petroleum and coke	375	386	354	339	4,320	4,330	4,780 ^r	4,810 ^r
Natural gas	38	35	39	38	491	490	512 ^r	510 ^r
Total	414	420	393	378	4,810	4,820	5,300 ^r	5,320 ^r
PAD 4 and 5: ⁴								
Petroleum and coke	119	118	110 ^r	111 ^r	1,350	1,310	1,390 ^r	1,400 ^r
Natural gas	85	87	86 ^r	87 ^r	1,270	1,280	1,410 ^r	1,420 ^r
California	98	97	90 ^r	91 ^r	1,080	1,040	1,050 ^r	1,050 ^r
Total	204	204	195 ^r	199 ^r	2,620	2,590	2,800 ^r	2,810 ^r
Grand total	712	720	679 ^r	668 ^r	8,720	8,700	9,380	9,410

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions.

³Includes the U.S. Virgin Islands.

⁴Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

(Million metric tons per year [annualized basis]
and dollars per metric ton for period shown)

	2005			2004
	December	November	Total	total
Production	8.38 ^p	8.26 ^r	8.72 ^r	9.38
Shipments	8.48 ^p	8.12 ^r	8.70 ^r	9.41
Exports of sulfur	NA	0.17	0.54	0.95
Imports of sulfur:				
Canada	NA	2.19 ^e	1.95 ^e	2.01
Mexico	NA	0.35	0.46	0.55
Total ²	NA	2.83 ^e	2.76 ^e	2.85 ^e
Export of H ₂ SO ₄	NA	0.08	0.29	0.20
Import of H ₂ SO ₄ :				
Canada	NA	1.68	1.85	1.92
Europe	NA	0.06	0.10	0.21
Total ²	NA	2.20	2.66	2.39
Consumption: ³				
Domestic sources	NA	7.96	8.07	8.35
Imports	NA	2.83 ^e	2.76 ^e	2.85 ^e
Total	NA	10.79	10.83	11.21
Sulfur export values ⁴	NA	\$210	\$88	\$67
Sulfur import values: ⁴				
Canada	NA	\$20	\$16	\$16
Mexico	NA	\$39	\$40	\$52
Average	NA	\$24	\$25	\$27
H ₂ SO ₄ export values ⁴	NA	\$142	\$89	\$105
H ₂ SO ₄ import values: ⁴				
Canada	NA	\$43	\$39	\$38
Europe	NA	\$38	\$32	\$32
Average	NA	\$38	\$38	\$36

^eEstimated. ^pPreliminary. ^rRevised. NA Not available.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes other countries not listed.

³Because December trade data were not available, December consumption was not determined.

⁴Average value per ton for most recent data available.